

# PATENT ABSTRACTS OF JAPAN

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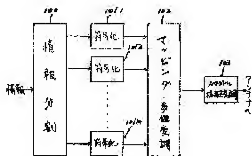
## (54) INFORMATION COMMUNICATION EQUIPMENT

### (57)Abstract:

**PURPOSE:** To realize information transmission at a high speed with high reliability in an optimum state even when sufficient number of spread codes are not used under a permissible condition by providing a specific information division means, a specific coding means and a specific multi-value modulation means or the like to the equipment.

**CONSTITUTION:** An information division section 100 divides input information into m-sets of information. Coding sections 1011-101m correct errors in divided information sets (information series). A mapping multi-value modulation section 102 maps each signal of the coded information series to conduct multi-value modulation and a spread spectrum modulation section 103 applies spread spectrum modulation to the information subject to multi-value modulation

and synthesis. Through the constitution above, The information division section 100 selects number of divisions (m) so that the communication quality of the information to be sent is optimum depending on the information transmission speed, the information quantity or number of users in a cell or the like. After coding in an optimum form, the multi-value modulation section 102 maps the information series to a multi-value signal space in matching the division number (m) selected adaptively to conduct multi-value modulation.



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